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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/088,650      | 03/20/2002  | Katsuhiko Hiramatsu  | L9289.02147         | 2769             |

24257 7590 11/03/2004

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EXAMINER

CHO, UN C

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2687

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/088,650

Applicant(s)

HIRAMATSU ET AL.

Examiner

Un C Cho

Art Unit

2687

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/20/2002</u> . | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Drawings*

1. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 – 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith (US 5,642,355).

Regarding claim 1, Smith discloses a base station apparatus comprising delay time measuring means (timing advance control logic) for measuring propagation delay time (distance of the mobile station with respect to the base

station) of a radio channel and channel assigning means (timeslot allocation) for carrying out channel retrieval in an order based on the propagation delay time measured by said delay time measuring means (timing advance control logic) when carrying out channel assignment (timeslot allocation) (Col. 1, lines 38 – 45 and Col. 3, lines 29 – 59).

Regarding claim 2, Smith discloses that the channel assigning means (timeslot allocation) refers to a table (timeslot group, Fig. 5) that indicates a range of propagation delay time assigned to each slot (real and virtual distance of mobile station with respect to the base station) and carries out the channel retrieval (timeslot allocation) from a slot in which the measured propagation delay time (range of distance) is within said range (Col. 6, line 48 through Col. 7, line 24).

Regarding claim 3, Smith discloses a communication terminal apparatus that carries out radio communication with the base station apparatus comprising transmitting means for transmitting signals via a channel of the uplink assigned by said base station apparatus and receiving means for receiving signals via a channel of an assigned downlink (it is inherent that after a channel is allocated (timeslot allocation) to a mobile station, the mobile station will use that particular channel to communicate with the base station) (Col. 2, lines 49 – 55).

Regarding claim 4, the claim is interpreted and rejected for the same reason as set forth in claim 1.

Regarding claim 5, the claim is interpreted and rejected for the same reason as set forth in claim 2.

***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sarkioja et al. (US 5,774,808) discloses a method for allocating radio channels in a cellular communication system, each cell having at least one base station communicating with the subscriber terminal equipment by means of a traffic channel specific for each connection.

Parantainen et al. (US 6,242,881) discloses a dynamic channel allocation method based on monitoring of signal levels.

Benveniste (US 5,956,643) discloses a channel assignment system assigning channels to various cells by the optimal partitioning of the available radio frequencies into non-overlapping sets.

Oksala (US 6,477,151) discloses a method of synchronizing radio signal transmission slots at a mobile station to radio signal reception slots at a base station subsystem to account for a propagation delay between the mobile station and the base station subsystem.

Keskitalo et al. (US 6,128,486) discloses a base station receiver and a reception method in a CDMA cellular radio system including at least one base station communicating with a plurality of mobile station situated within its area.

Art Unit: 2687

Ishikawa et al. (US 5,666,655) discloses a mobile communication system using an autonomous distributed type dynamic channel allocation scheme.

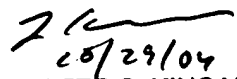
Olds et al. (US 5,732,351) discloses that the channel is assigned using a cost function, which includes a distance factor and an isolation factor.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Un C Cho whose telephone number is (703) 305-8725. The examiner can normally be reached on M ~ F 8:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (703) 306-3016. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Un C Cho 10/25/04 VC  
Examiner  
Art Unit 2687

  
10/29/04  
LESTER G. KINCAID  
PRIMARY EXAMINER